California GARDEN

MARCH–APRIL 1985
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HORTICULTURE CALENDAR

MAR 2, 3	**SAN DIEGO DAYTIME AFRICAN VIOLET SOCIETY 4TH ANNUAL SHOW "March of Violets"** Majorca Room, Casa del Prado, Balboa Park, San Diego Sat: 1:00 to 5:00 p.m. Free
MAR 7, 14, 21, 28 San Diego Floral Event	**THURSDAY WORKSHOP WITH COLLEEN WINCHELL** Free Floral Crafts Instruction - Open to the Public San Diego Floral Association Library, Casa del Prado, Balboa Park Thurs: 10:00 a.m. to 3:00 p.m. - Information: 479-6433
MAR 13, 20, 27 APR 3 SDiego Floral Event	**WESTERN FLOWER ARRANGING WITH MARTHA ROSENBERG** Majorca Room, Casa del Prado, Balboa Park, San Diego Wed: 10:00 a.m. to 3:00 p.m. - Information: 298-5182 or 296-2757
MAR 15, 16, 17	**SANTA BARBARA INTERNATIONAL ORCHID 40TH ANNIVERSARY SHOW "SANTA BARBARA ORCHIDLAND USA"** Flower Building, Earl Warren Showgrounds, Santa Barbara, Calif. Fri. & Sat: 10:00 a.m. to 10:00 p.m. Sun: 10:00 a.m. to 5:00 p.m. General Admission: $4; Groups, Sr. Citizens, Students $2; Children free (accompanied)
MAR 16, 17	**17TH ANNUAL FESTIVAL OF IKEBANA & JAPANESE ART - SAN DIEGO CHAPTER 119, IKEBANA INTERNATIONAL** Majorca Room, Casa del Prado, Balboa Park, San Diego Sat. & Sun: 11:00 a.m. to 4:30 p.m. Free
MAR 16, 23 San Diego Floral Event	**GARDEN STUDY COURSE IV** San Diego Floral Association and Palomar District, California Garden Clubs, Inc. San Diego Floral Association Library, Casa del Prado, Balboa Park, San Diego Information: 442-4242 (Don Boyer) or 295-1537 (Martha Rosenberg)
MAR 22, 23, 24	**SAN DIEGO ORCHID COUNTY SOCIETY 39TH ANNUAL SHOW "RAINBOW OF ORCHIDS"** Al Bahr Shrine Temple, Highway 163 & Clairemont Mesa Blvd., San Diego Fri: 7:00 to 10:00 p.m. Sat: 9:00 a.m. to 9:00 p.m. Sun: 9:00 a.m. to 5:00 p.m. Donation: $1.50
MAR 28, 29	**FLOWER ARRANGERS' GUILD OF SOUTHERN CALIFORNIA "SPRING–CREATIVE WAY"** San Marino Woman's Club, 1800 Huntington Dr., San Marino, Calif. Thurs:1:00 to 8:00 p.m. Fri:10:00 a.m. to 5:00 p.m. Donation $3
MAR 30, 31	**PALOMAR ORCHID SOCIETY EASTER PARADE OF ORCHIDS** Plaza Camino Real Mall (Lower Level), 2525 El Camino Real, Carlsbad, Calif. Sat: 10:00 a.m. to 6:00 p.m. Sun: 12:00 to 5:00 p.m. Free
APR 4, 11, 18, 25 San Diego Floral Event	**THURSDAY WORKSHOP WITH COLLEEN WINCHELL** Free Floral Crafts Instruction - Open to the Public San Diego Floral Association Library, Casa del Prado, Balboa Park Thurs: 10:00 a.m. to 3:00 p.m. Information: 479-6433
APR 7	**CONVAIR GARDEN CLUB'S 36TH ANNUAL ROSE SHOW** Majorca Room, Casa del Prado, Balboa Park, San Diego Sun: 1:00 to 5:00 p.m. Free
APR 13, 14	**CORONADO FLORAL ASSOCIATION 60TH ANNUAL STANDARD FLOWER SHOW & GARDEN TOUR "KALEIDOSCOPE"** Spreckels Park, Orange Ave. (Between 6 & 7), Coronado, Calif. Sat: 1:15 to 5:30 p.m. Sun: 10:00 a.m. to 4:00 p.m. Donation: $1.50 (Child 25¢)
APR 13, 14	**RANCHO SANTA FE GARDEN CLUB ANNUAL FLOWER SHOW & PLANT SALE "LITERATURE IN FLOWER"** Garden Club, Avenida Acacias & La Granada, Village Center, Rancho Santa Fe, Calif. Sat: 1:00 to 5:00 p.m. Sun: 10:00 a.m. to 5:00 p.m. Free

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COVER: Drawing by Karen Kees, a professional artist and garden designer-consultant. The flowers in this drawing were from her prize-winning garden.

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Photo by Bill Ross

WILDERNESS GARDENS

Dorothy Dudley Muth

CALIFORNIA GARDEN AFICIONADOS are aware of the world famous 165 acre Descanso Gardens in La Canada, California, but how many know that its developer Manchester Boddy planted over 100,000 camellias under a wild canopy of oaks and sycamores in northern San Diego County, west of the Palomar Mountain observatory?

Located in a canyon approximately one mile wide and two and half long, the 584 acres that ribbon along the San Luis Rey River on the western rim of Pauma Valley, were planned to be Boddy's second botanical garden.

The former owner of the Los Angeles Daily News called his retirement hideaway "Wilderness Gardens." Beginning in the mid-50's and for the next 15 years, Boddy planted rooted cuttings of 30 varieties of camellias among the magnificent stands of native trees.

At the garden's peak it resembled a medieval tapestry. Beneath the cathedrallike oak and sycamore arches, among the verdant fern, the thousands of camellia bushes were an annual riot of pert pink, saucy red, opaline white, and blushing rose blossoms.

Boddy installed greenhouses and an excellent irrigation system with a series of five ponds. Besides his dream of a camellia plantation, Boddy added such plants as shiny-leaved holly, varigated pittosporum, pampas grass, roses, fremontia, bottle brush, eucalyptus, pyracantha, and oleanders.

When Boddy died in 1967 Wilderness Gardens was abandoned and the grounds and gardens, un-

Under a canopy of oak and sycamore trees some of Mr. Boddy's camellias can still be found.

attended, slowly reverted to a wilderness where native creatures and vagrants roamed unheeded.

Eyed by prospective developers for uses as diverse as a trailer park, a crash of condos to a golf course, concerned citizens set out to save Boddy's wilderness wonderland.

A state-wide organization S.W.A.P. (Small Wilderness Area Preserves) formed a San Diego chapter during 1972-73. Its members performed the herculean task of raising $250,000 for an area few knew existed. The County of San Diego came up with matching funds to buy and preserve the beautiful, historical place.

Before Boddy saw its potential, the area was already rich in history. According to San Diego's Museum of Man a series of petroglyphs above the preserve are archaeologically important and the ancient rock carvings are unusual for this far west.

A Luiseno Indian trail through the canyon served as a link between inland and coastal settlements. Remains of the 1850-1861 Butterfield Stage spur can be seen, as well as the stone foundation of San Diego County's first grist mill built in 1880.

Prior to the opening of Wilderness Gardens Preserve to the public in 1983, San Diego County Park Ranger Torrey Lystra, with the help of the California Conservation Corp, probation personnel, and environmentally concerned volunteers, labored long and lovingly to unjungle the overgrowth, free the reed-choked first and second ponds, provide 12 walk-in tent sites, and clear paths through the canyon floor and to the two pastoral meadows above the canyon.

Besides the resurrection of Boddy's legacy of cultivated flowers, there now is a legion of wild flowers poking their petals amid the native sugar brush, toyon, ceanothus, chamise, manzanita, and buckwheat. White and black sage add their heady fragrance to this geographical jewel.

As Wilderness Gardens Preserve unfolds with its concept to develop a sanctuary where man can co-exist with wild life, 141 species of birds carol their pride in this unique area. Squirrels, desert cottontail rabbits, coyotes, bobcats, ring-tailed raccoons, opossums, mule deer, and a variety of reptiles are among the fauna happily sharing this hideaway with nature lovers. Wilderness Gardens epitomizes a forest wilderness where the universes of flora, fauna, and mankind are blossoming.

Damselflies, dragon flies, and butterflies thread their spangled colors through the reed-looms along the two acre first pond where one can fish for bullhead catfish, large-mouthed bass, and bluegill.

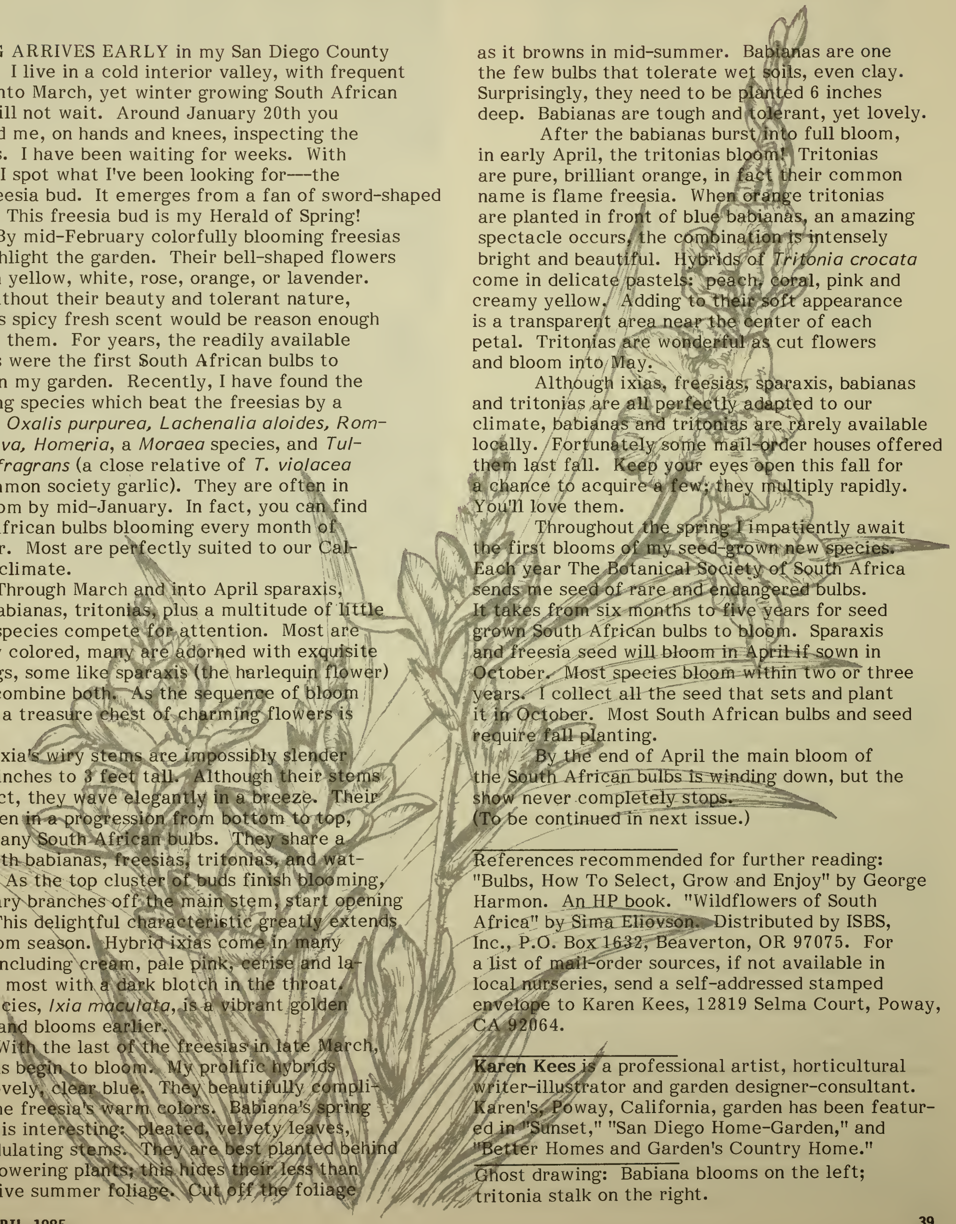
Horticulturalists remain astounded that despite the neglect of years, so many camellia bushes survived in the wild without water year after year. Boddy who was a camellia expert, developed some excellent stock and obviously did an exceptional job as 28 varieties have survived.

There is still an arduous amount of work

(Continued on Page 50)

A Calendar of South African Bulbs

Text and ghost drawing by Karen Kees



SPRING ARRIVES EARLY in my San Diego County garden. I live in a cold interior valley, with frequent frosts into March, yet winter growing South African bulbs will not wait. Around January 20th you will find me, on hands and knees, inspecting the freesias. I have been waiting for weeks. With a thrill I spot what I've been looking for---the first freesia bud. It emerges from a fan of sword-shaped leaves. This freesia bud is my Herald of Spring!

By mid-February colorfully blooming freesias will highlight the garden. Their bell-shaped flowers come in yellow, white, rose, orange, or lavender. Even without their beauty and tolerant nature, freesia's spicy fresh scent would be reason enough to grow them. For years, the readily available freesias were the first South African bulbs to bloom in my garden. Recently, I have found the following species which beat the freesias by a month: *Oxalis purpurea, Lachenalia aloides, Romulea flava, Homeria*, a *Moraea* species, and *Tulbaghia fragrans* (a close relative of *T. violacea* the common society garlic). They are often in full bloom by mid-January. In fact, you can find South African bulbs blooming every month of the year. Most are perfectly suited to our California climate.

Through March and into April sparaxis, ixias, babianas, tritonias, plus a multitude of little known species compete for attention. Most are brightly colored, many are adorned with exquisite markings, some like sparaxis (the harlequin flower) boldly combine both. As the sequence of bloom unfolds a treasure chest of charming flowers is opened.

Ixia's wiry stems are impossibly slender and 18 inches to 3 feet tall. Although their stems are erect, they wave elegantly in a breeze. Their buds open in a progression from bottom to top, as do many South African bulbs. They share a trait with babianas, freesias, tritonias, and watsonias. As the top cluster of buds finish blooming, secondary branches off the main stem, start opening buds. This delightful characteristic greatly extends the bloom season. Hybrid ixias come in many colors including cream, pale pink, cerise and lavender, most with a dark blotch in the throat. The species, *Ixia maculata*, is a vibrant golden yellow and blooms earlier.

With the last of the freesias in late March, babianas begin to bloom. My prolific hybrids are a lovely, clear blue. They beautifully compliment the freesia's warm colors. Babiana's spring foliage is interesting: pleated, velvety leaves, and undulating stems. They are best planted behind later flowering plants; this hides their less than attractive summer foliage. Cut off the foliage as it browns in mid-summer. Babianas are one the few bulbs that tolerate wet soils, even clay. Surprisingly, they need to be planted 6 inches deep. Babianas are tough and tolerant, yet lovely.

After the babianas burst into full bloom, in early April, the tritonias bloom! Tritonias are pure, brilliant orange, in fact their common name is flame freesia. When orange tritonias are planted in front of blue babianas, an amazing spectacle occurs, the combination is intensely bright and beautiful. Hybrids of *Tritonia crocata* come in delicate pastels: peach, coral, pink and creamy yellow. Adding to their soft appearance is a transparent area near the center of each petal. Tritonias are wonderful as cut flowers and bloom into May.

Although ixias, freesias, sparaxis, babianas and tritonias are all perfectly adapted to our climate, babianas and tritonias are rarely available locally. Fortunately some mail-order houses offered them last fall. Keep your eyes open this fall for a chance to acquire a few; they multiply rapidly. You'll love them.

Throughout the spring I impatiently await the first blooms of my seed-grown new species. Each year The Botanical Society of South Africa sends me seed of rare and endangered bulbs. It takes from six months to five years for seed grown South African bulbs to bloom. Sparaxis and freesia seed will bloom in April if sown in October. Most species bloom within two or three years. I collect all the seed that sets and plant it in October. Most South African bulbs and seed require fall planting.

By the end of April the main bloom of the South African bulbs is winding down, but the show never completely stops.

(To be continued in next issue.)

References recommended for further reading: "Bulbs, How To Select, Grow and Enjoy" by George Harmon. An HP book. "Wildflowers of South Africa" by Sima Eliovson. Distributed by ISBS, Inc., P.O. Box 1632, Beaverton, OR 97075. For a list of mail-order sources, if not available in local nurseries, send a self-addressed stamped envelope to Karen Kees, 12819 Selma Court, Poway, CA 92064.

Karen Kees is a professional artist, horticultural writer-illustrator and garden designer-consultant. Karen's, Poway, California, garden has been featured in "Sunset," "San Diego Home-Garden," and "Better Homes and Garden's Country Home."

Ghost drawing: Babiana blooms on the left; tritonia stalk on the right.

BROMELIADS

Masters of Versatility

Linda Prell

Aechmea fasciata variegata (foreground);
Ananas bracteatus striatus (background).
Photo by Bill Gunther

DO YOU 'TOSS' a bromeliad plant once it finishes blooming and starts to show signs of decline? If you follow this practice you may dispose of a worthy plant just entering its most productive stage.

Bromeliads were discovered in 1493 by Christopher Columbus during his second trip to the New World. He returned with the now-popular pineapple. Bromeliads remained relatively unknown outside of Europe until 1950 when the Bromeliad Society was established. They have been growing in popularity ever since due to their adaptability as these plants can adjust to artificial light, air-conditioning and abnormal amounts of moisture. They seem to thrive on neglect, a feature worth mentioning in today's fast-paced society. However, the most successful gardeners try to simulate the growing conditions of the plants natural habitat.

Bromeliads are native to tropical America and grow wild from the southern part of the United States deep into South America. They can grow on trees (epiphytic), on rocks (saxicolous), or on the forest or desert floor (terrestials). They range in size from 1 inch to 35 feet or more and can grow in altitudes from sea level to 14,000 feet. Bromeliads can be found in sea level jungles, mountain cloud-forests, low coastal slopes, and dry deserts.

Over 2000 species and hundreds of varieties of bromeliads have been identified. Growers are hybridizing new varieties almost daily. Of course pineapple is the best known example followed closely by Spanish moss found in our Southern States.

All bromeliads have scales on their leaves which serve as an absorption mechanism. They actually draw moisture out of the atmosphere. The distribution of these scales causes the banding pattern seen on many plants, but they may also be hidden from view.

Bromeliads usually take the form of a rosette of strap-shaped leaves that holds water in a cup in the center. Some leaves are tough and edged with spines, others are soft and pliable. Coloration can vary from pale yellow-green to almost black. The leaves may be banded, lined, mottled, or spotted. The design or striation may be white, gray, black, cream, purple, yellow, pink, or a combination of several shades. This plant is a decorator's dream.

Varying the light intensity can affect both the coloration and the shape and length of the leaves. I found this out the hard way. As a novice I was very proud of one plant that I had grown from an offshoot. It had lovely soft green leaves and looked, I thought, like a healthy specimen. It was only after contacting other growers that I learned that my plant should have been red.

CULTURE

WATERING

Bromeliads that have soft, green leaves with a cup that holds water such as neoregelias, vrieseas, guzmanias, and nidulariums usually need shade, humidity, and water in their cups. At all times they prefer a damp, but not soggy soil mix.

Bromeliads with stiff succulent leaves without a place to hold water, such as dyckias, can withstand more light and periods of drying.

Those plants usually covered with scales, such as tillandsias, and some of aechmeas and billbergias, need constant light. They should be misted frequently, but never soaked. These plants usually do better if allowed to dry out for a short time between waterings.

TEMPERATURE

In their natural habitats bromeliads can endure temperatures over 100° F. to near freezing. But, most prefer a night temperature no lower than 45° F. and day temperature in the 70's and 80's.

POTTING MIX

Most bromeliads will grow in any light porous acid mix that holds the plant in place and drains immediately, and holds the plant in place. Fir bark and redwood bark are commonly used. Heavily scaled tillandsias do best in treefern fiber or mounted on cork bark, fern slabs, tree limbs and roots.

FERTILIZER

Since we have removed these plants from their natural environment we must provide the nutrients essential for growth. Some growers add time-release pellets to the potting mix, while others use a liquid fertilizer, spraying the foliage and the mix. It really does not matter which fertilizer is used as long as it is a weak solution applied at frequent intervals.

BLOOMING

To bloom a bromeliad requires a lot of patience. The blossom can take from one year to a dozen or more before appearing. Usually, under good conditions, aechmeas, billbergias, neoregelias, and vrieseas will flower in two years from an offshoot. Most bromeliads bloom only once. The mother plant eventually dies within one to two years after flowering. Before dying, however, the mother plant sends out one or more offshoots from the base of the plant or from the arils of the leaves. These may be removed to make separate plants when they are at least one-third the size of the parent and have five leaves. They should be cut off with a sharp knife and planted separately.

Photo courtesy The Bromeliad Society, Inc.

The arresting pink bract of _Tillandsia_ _cyanea_ rises from the heart of swordlike foliage. Delicate flowers are cornflower blue.

One should not be discouraged if a plant does not survive. There are many growing conditions over which there is no control. If one plant fails, try another. You're bound to find one that will grow in your environment. There are hundreds of bromeliads that can be grown successfully without too much effort. Do not be afraid to experiment. If a plant is not doing well try fresh potting mix, a new location, or a different watering and feeding program.

As with other species no two growers have the same techniques. Listen to the advice of fellow growers, but temper it with your own experience relating to your situation. Remember that full sun in one garden is nowhere near the intensity of full sun in a different location. Experience is the best teacher so follow your own common sense in judging growing conditions.

I hope you will derive as much pleasure from growing these "jungle gems" as I have.

Linda Prell has successfully grown bromeliads for 10 years. She is an active member of the San Diego Bromeliad Society.

Transplanting Potted Houseplants

Elizabeth B. Glover

HOUSEPLANTS PURCHASED in tiny 2-inch pots will soon need to be transplanted. Sooner or later the roots of any plant in a container will fill all available space and become rootbound. Growth slows or stops and unless the plant is well watered and fed, it loses its vigor and may eventually die.

There are some plants that bloom better and really thrive when their roots are crowded. If you purchase this type it is wise to remove it from its pot, check the root system, and replenish the soil with a planter mix that you consider appropriate. Repot it in the same container, not a larger one.

Frequent repotting of houseplants is not necessary, and usually plants placed in containers 5 inches or larger in diameter can stay in the same pots for from 12 to 18 months. Many houseplants, such as African violets, will thrive in pots that appear too small for them.

Houseplants can be repotted at any season, although the best time is in the spring before the new growth appears. The roots then have time to become established in the new soil before winter. At other seasons, repotting may slow growth for a brief period, but eventually there will be a burst of activity again.

Plants should be shifted to larger containers when they have completely filled their present container with their root system and/or the roots are protruding from the drainage hole. Select a proper-sized container, one which is large enough to provide for future root development, and which allows an inch or two of fresh soil on all sides of the root mass. If the pot is too large, the unused soil in the pot can become stagnant, and be a haven for potentially harmful organisms.

Normally, the rule when repotting is to transplant to the next larger size container, such as from a 2-inch pot to a 4-inch pot. If you have a fast growing plant, skip one size and place the 2-inch potted plant in a 6-inch pot. Two or three smaller plants may also be transferred to a 6-inch pot. Water a plant several hours before transplanting so that the root ball will be moist.

Always use a clean pot. If you do not have a new one, wash, scrub, and sterilize the old one. Use one part bleach to 9 parts of water to kill all diseases and insects. Cover the drainage hole of the pot with a shard, crock, screen, or stuff the hole with a tightly rolled piece of old nylon stocking. Select a good quality planter mix appropriate for the type of plant to be repotted. The mix should provide good drainage and be porous enough to allow good root development. Moisten the planter mix, but do not let it get soggy. Partially fill the container with moist planter mix.

In order to remove the plant from the container, first loosen the planting mix around the edges of the pot with a knife and slide it out of the container. If it does not slip out easily, place one hand on top of the pot with the stem between the index and second finger. Grasp the bottom of the pot with the other hand, then invert and tap rim of the pot sharply against the edge of a potting bench or table. Lift pot off, steadying the root ball with one hand. If the roots are too crowded, gently loosen and spread them a little. Cut off any roots that twine around the root ball. Examine the root system by crumbling away the excess soil or planter mix. Healthy but crowded roots are an indication that the plant needs a larger container. A weak root system means that it should be replanted in a smaller container to encourage growth. If the plant's root ball appears compacted, vertically cut it with a very sharp knife, encourage roots to move out into new soil in the larger container. Make at least four equally spaced cuts about ¼ to 1 inch deep, if practical.

Place the root ball in the center of the root at the same depth it was in the original container. Add moist planter mix around the plant and fill to within one inch of the top. Press the mix down firmly to get the proper root contact.

After moving a plant from one container to another, it is important to treat the plant with vitamin B1 to minimize shock to the root system and get the plant off to a stronger start by stimulating rapid root development.

Place the pot in a shallow plan of water and let it soak up moisture until the surface darkens and air bubbles stop rising. Remove from the pan and place pot in a saucer to drain excess water. Thereafter, it should be watered sparingly for a few weeks to encourage the roots to grow into the new soil.

Most of the problems that affect houseplants can be attributed directly to improper watering practices. Overwatering and lack of sufficient drainage yield identical results---unhealthy plants. Excessive moisture in the root area saturates the air cells, thereby depriving the roots of the necessary oxygen and causing root rot, leaf diseases, defoliation, and eventually death. Plants need water to live, but do not want to be drowned.

There are two types of food for houseplants - one to promote blooms and the all-purpose type. Both are excellent and can be used every time you water during the growing season, or every three or four weeks when growth is slow. Many people use the fertilizer at quarter or half strength when they feed regularly.

No general statement can be made about the proper amount of light, water needs, temperature, or best humidity for houseplants. All of these factors must be considered in determining the best location for your house plant.

Light is the energy source required by all green plants for proper function and growth of the leaf area. Some plants want more light than others. In general, flowering plants need considerable more light to bloom. Few can stand direct sunlight. Variegated foliage plants require more light than solid green plants. Almost every indoor plant likes some degree of sunlight. When the location of a plant is changed from sun to shade, shock may set in. It takes time to adjust. Try to avoid abrupt changes. To find the best location, it may be necessary to move the plant a few times.

Determine the water needs of a plant. Does it need misting, a drying out period, or to be kept moist?

Most homes keep their temperature and humidity range proper for humans to live in, but it is not necessarily proper for plants. Tropical indoor plants like humidity and often need misting. Do not overheat or chill plants. Also do not locate them near gas appliances, heater vents, or windows that are usually opened and shut.

Houseplants depend entirely upon you for all their physical needs. Learn about their specific requirements early so that you can care for them correctly and enjoy their beauty as they mature into healthy, beautiful plants.

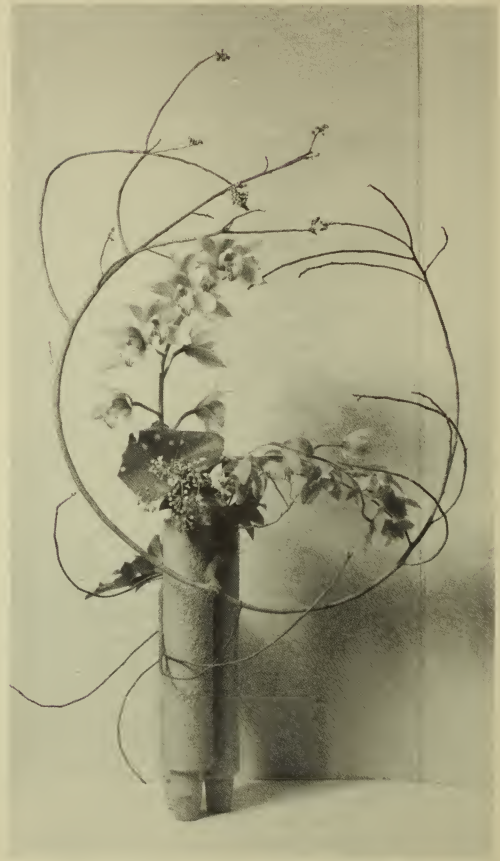
Elizabeth Glover, a naval officer, has made gardening her pastime pleasure since her retirement ten years ago. She also grows many of her plants, both indoors and outdoors, in pots.

Sharon Siegan

1929 - 1985

Sharon Siegan, writer, sculptor, and flower arranger shared her creative talents with California Garden and was a member of the publication board. She was a devoted writer of articles and book critiques since 1976. She is the author of the book "Torn Leaves." San Diego Floral Association feels a great loss.

Orchid Arrangement



A classic arrangement in an orchid show with cymbidiums, bare branches, and ligularia leaves (leopard plant). ®Photo by Asael Arce

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Growing Plants From Seed

Pat Bleecker

SOWING SEEDS

In advance of sowing gather together all of your equipment and then settle down for a pleasant time. For each packet of seed have a label and fill it out with the name and date and put it with the seed packet. Some years ago, Josephine Gray an expert gardener who grew almost everthing from seed, taught me the fundamentals of sowing seeds for maximum germination. After one afternoon with her, she said, "I hope I haven't led you down the garden path about seed sowing. It isn't difficult and I don't even use incantations anymore!" [Ed: The late Josephine Gray wrote for this magazine for 10 years, primarily on herbs, her speciality.]

Mrs. Gray used a soil mix given in the *Royal Horticulture Society Journal* many years ago, but in recent years vermiculite has been found to be much easier to use and equally satisfactory. Put vermiculite in a shallow container with drainage holes. (I use empty cherry tomato containers, used pony paks, etc.) One caution, do not be tempted to reuse the vermiculite or soil for seeds; always use fresh sterile growing mediums. Use the once used medium for cuttings or as an additive to potted plants. Sprinkle the seeds on top of dry vermiculite and shake the container---all but the largest seeds will be covered nicely in this way---for larger seeds, sprinkle a little more vermiculite over the top. After the seeds are sown, place the container in a pan of water an inch or two deep and let the whole container become quite wet. Set it aside on a tray or cookie sheet and add the label immediately. Wait until the entire tray is complete before covering with glass and wet newspaper or cut up brown paper bags. Place the tray in a warm place and peek regularly; you want to be sure to uncover the plants just as soon as the seeds have germinated. Tall floppy seedlings often result when the cover is not removed soon enough. Extreme cases are difficult to correct.

As soon as a container is uncovered give it as much light, without direct sunlight, as you can. When the seedlings become larger move them into brighter quarters but never direct sunlight. They dry out too quickly and total wilt is total annihilation. I have a plant stand of two shelves which is covered with a plastic roofing. This allows a maximum of light without the burning rays of the sun. The baby plants need to be watched and given food common-sense care. They need to be turned as needed, that is, when they start leaning toward the light. This may vary with size and make up of individual plants. Do not use a formula, just use love.

Vermiculite stays fairly damp without too much attention. If it jiggles when you pick it up and examine it, it is too dry. This is easily remedied by dipping the container into several inches of water for a few seconds.

The first 'leaves' which appear are distinctive and often hint at the final pattern of the true leaf, but these first leaves are really cotyledons and you must wait until the second set or true leaves appear. When the true leaves are fully developed the plant is ready to be transplanted or pricked out, to use the gardener's term. The plant, if not too crowded, can stay in the container for a little while longer. Use your own judgement with regard to how crowded it is and how fast it grows. Some annuals change radically from day to day while some perennials change slightly from week to week. You will know.

A bean just breaking ground.

PRICKING OUT

Plan ahead a bit and let the container with the plants ready to be pricked out become rather dry as the growing medium will not cling so tenaciously to the roots and transplanting will not be such a shock. The advantage of vermiculite over a soil mix is that the roots are released ever-so-readily and do not get so tangled, but since the roots are not so protected by the soil, you must work quickly and in small amounts. If roots are exposed too long to drying winds, they will be lost no matter what you do.

Potting-On Mix
1½ tsp hydrated lime
2 tbsp John Innes Base
8 qts Super Soil

John Innes Base
2 parts hoof & horn
2 parts 20% superphosphate
1 part potash

In a large pan, such as an old dishpan, mix the soil with the chemicals. When thoroughly mixed, add water until the mix is moist, but not so moist that it is mud. Line a wooden flat with newspaper, two layers are best, and fill with the soil mix. (It will take more than one large pan full to fill a flat.) Spread the soil carefully to all corners and tamp down with a block of wood or a small bread board. Press down firmly so there are no air pockets.

Choose a day when there is not a strong drying wind. Cover a table with a slick-surface material, such as an old shower curtain. Work sitting down if possible, this is slow careful work, especially if you have a whole flat to do. Start with a small container of seedlings, loosen and remove a few of them with a plastic fork. Scoop up the seedlings and let them drop from about a foot above the table. When they drop, they will slightly unravel so when they are pulled apart, the roots will not be damaged as much as they would be without the dropping process.

Carefully prick out one seedling at a time and use the leaves as a handle, not the stem. The stem is so tiny that it is possible to pinch it right off. Use a pointed dibble stick to make a proper size hole. Sometimes it is practical to make a lot of holes in rows at one time. Place the tiny plant in the hole and use the stick, or your fingers in some cases, to be sure the soil is pressed down around the roots. This is very important so there are no air pockets to dry out the roots.

Continue to plant in neat rows at evenly spaced intervals. Use your own judgement as to spacing, always at least 2 inches apart, but seldom farther than 3 inches. When the flat is finished, spray the seedlings with a sprayer filled with a very weak solution of liquid fertilizer or vitamin B solution; this helps to reduce transplant shock. Put the flat for a day or two in a sheltered place with less sunlight than the seedlings have had, then move to filtered light. Do not forget to use your labels. When finishing out a row with another kind of plant, mix the plants so that those with similar leaves are not next to each other. Give yourself all the help you can.

Often I find it convenient to do the pricking out into small containers, depending on how many seedlings I am handling at that time. The only difference is that when the containers are filled, I set them into deep pans of weak fertilizer solution and let them become saturated before I set them in a shady place. This method of watering is a bit easier for me than spraying the large flat. In either case do not let the seedlings ever dry out completely; it is virtually impossible to water them properly when this happens. If they are where you can see them often, you are reminded to keep them moist, not wet.

When it is time for the plants to go into the garden or into pots, depending on their type and ultimate use, it is best if they can be exposed to brighter light for a day or so. This can be a nuisance sometimes since they tend to dry out so quickly, but I think it is worth the time. When you are ready to put them into the open garden, they are ready for the move. After transplanting, water with a weak fertilizer solution or a vitamin B solution and cover for a day or two, depending on the weather. You can use bushel baskets, if they still exist, plastic pots, or whatever, just be sure you do not bake them---the idea is protection, not torture.

This is a specific branch of the gardening hobby that some of us prefer above all others. It is clearly not worth your while to raise ordinary things which are readily and inexpensively available in pony paks, but it is great fun to raise the more unusual or expensive plants and even greater fun to share your overflowing bounty with friends. The whole process is simple and satisfying. It is really much more complicated on paper than in the doing. Happy growing.

[Ed: See "Know Your Seedlings" - March-April 1984 issue. Pages 55-57.]

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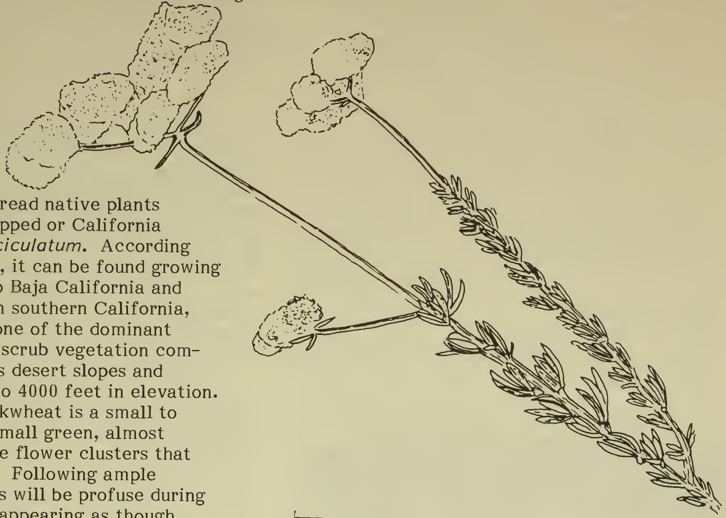
FLAT-TOPPED BUCKWHEAT

Text and Drawing by Thomas A. Oberbauer



ONE OF THE most widespread native plants in California is the flat-topped or California buckwheat *Eriogonum fasciculatum*. According to Munz's *California Flora*, it can be found growing from Central California to Baja California and from the coast to Utah. In southern California, flat-topped buckwheat is one of the dominant plants in the Coastal sage scrub vegetation community, but it also inhabits desert slopes and montane communities up to 4000 feet in elevation.

Flat-topped buckwheat is a small to medium sized shrub with small green, almost needlelike leaves and white flower clusters that grow into flattened heads. Following ample winter rainfall, the flowers will be profuse during June and July, sometimes appearing as though a lace tablecloth has been draped over the plants. Later, the flower heads usually remain on the plants, but turn a dark rust-brown color.

While in flower, flat-topped buckwheat is an important plant for bees. It was partially responsible for making southern California a prominent honey producing region during the latter part of the last century.

The wild buckwheat genus of about 150 species is predominantly a western North American group of plants. This group contains a variety of forms from thread-stem annuals to large bushy shrubs, and buckwheat species can be found from the tops of the highest mountains above tree line, down to the lowest deserts.

There are a number of buckwheats that are used in ornamental horticulture. Many people are familiar with the silver-leaved Saint Catherine's lace, *Eriogonum giganteum*, which is a native ornamental from Santa Catalina Island. Another buckwheat used in native plant gardens in California is the low growing Conejo buckwheat, *Eriogonum crocatum*, a shrub from Ventura County with sulphur colored flowers.

The flat-topped buckwheat is just one of the common plants that are too often considered brushy weeds. In reality, it has irreplaceable value as wildlife habitat, a food plant for native animals and as an important part of our natural landscape.

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SOME KENYA TREES

Text & Photos by
Thomas W. Whitaker

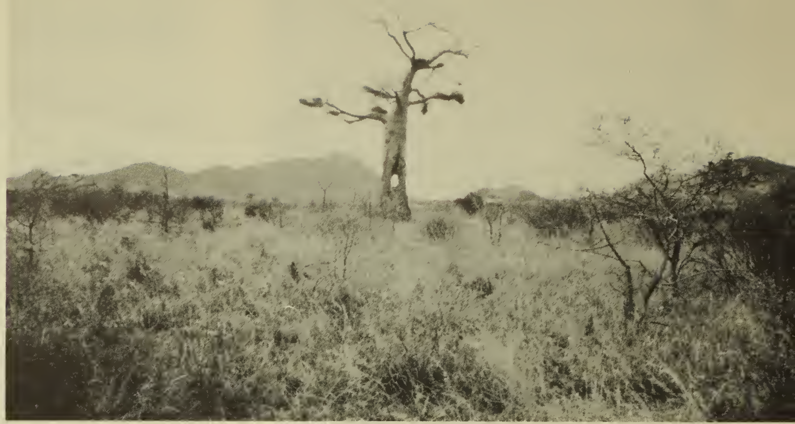

Fig. 1 Adansonia digitata, the beobab damaged by fire and elephants.

IN AUGUST, 1983, my wife and I had the privilege of visiting Kenya, one of the small East African countries about the size of Texas. Within this modest space, however, are a multitude of landscapes and habitats not duplicated elsewhere in the world in such a relatively small area. In spite of the fact it sits astride the equator, Kenya includes snow-covered Mt. Kenya. At 17,058 feet, this magnificent peak is higher than any found in the Rockies or Alps. In addition, there are harsh deserts, rain forests, enormous lakes, vast swamps, and volcanoes. The area we visited was mostly in Central and Southern Kenya.

Kenya is noted for its numerous and diverse populations of wild animal species. These animals are mostly confined to a series of twenty National Parks. The diverse habitats mentioned provide for a flora that is no less varied than the animal population.

There are three species of trees, numerically not large, that dominate most landscapes of Kenya. They are: *Adansonia digitata* Linn. - the Beobab (Fam. Bombacaceae); *Euphorbia candelabrum* Trem. ex Kotschy (Fam. Euphorbiaceae); and *Hyphaene coricea* Gaetn. the Doum Palm or Gingerbread Palm (Fam. Palmaceae).

Adansonia digitata

The branches are stout and stiff; the leaves are digitate, petiolate (5 inches long). The flowers are large, white, solitary, pendulous, and peduncles about twice the length of the leaves. There are 5 leathery, reflexed petals. The fruits are large, oblong, woody and filled with pulp.

The bulky trunk of the beobab (Figure 1) consists of very soft wood, useless for lumber, but it has been used with fair success to make paper. Unfortunately, the beobab is being decimated by numerous elephant herds. These huge animals tear large hunks of the soft wood from the trees, apparently for food. The result is severe damage and eventual death of the tree. Torn and mangled trees are frequent. The older trees evidently provide choice tidbits for the hungry, unrestrained pachyderms.

Trees damaged by fire often serve as a nesting place for insects, frequently bees. Natives plunder these natural hives for honey. The bees are stupefied or rendered less ferocious by smoldering elephant dung, and the honey retrieved.

The leaves of the beobab can be used as a vegetable according to some authorities. Dale and Greenway (1961) say the fruit and seed pulp are also edible. The fruit, properly processed, produces a cool drink and a dye is obtained from the roots. The species is found from sea level to elevations of about 4000 feet.

Hyphaene coricea

Hyphaene is a small genus of dioecious (the fruits are borne only on the female plants) palms, with dichotomously (repeatedly forking in pairs) branched trunks (Figure 2). Branching of mature plants is rare among palms and immediately attracts attention. Oddly, the young plants are unbranched. The trunks of most of the have been blackened by fire, but apparently the trees suffer no ill effects from destruction of the older dried leaves. Dale and Greenway's authoritative "Kenya Trees and Shrubs" states that the leaves produce a useful fiber for making baskets, mats, and roof thatching. The fruits are eaten by elephants. By so doing, these animals act as an agent of dispersal. The seeds are very hard and may be used as a substitute for ivory.

The trees of *H. coricea* we saw were located

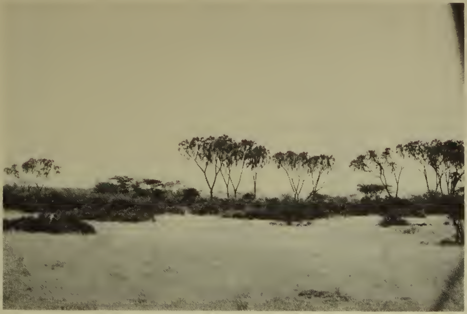

Fig. 2 Hyphaena coricea, the doum palm growing along water course.

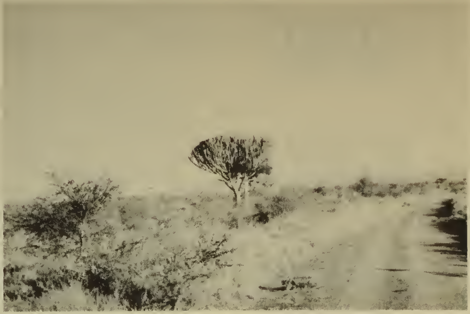

Fig. 3 Euphorbia candelabrum growing roadside in dry savannah-thornbush area.

along water courses. We estimated some of the taller trees at about 50 feet in height. They branch a maximum of 4 times by the equal growth of an auxiliary bud.

Burkill (1966) reports that the seeds of the doum palm are the commonest objects found in Egyptian tombs during the reign of the Pharoahs. It is also known as the gingerbread tree because the thick, fleshy, fibrous parts of the fruits resemble gingerbread in taste and color. The seeds are extremely hard and can be crafted into beads and buttons.

These unique and interesting palms deserve to be widely grown in California. They would add an attractive element to our already diverse, introduced palm flora.

Euphorbia candelabrum

This large, treelike *Euphorbia* is a common sight in East Africa (Figure 3). It grows from sea level to about 6000 feet. The trees are mostly solitary, and occur in savannah thornbush country, frequently on termite mounds.

Euphorbia candelabrum is a conspicuous sight in the savannah. It attains a height of up to 50 feet, and may be 3 feet in diameter. The distinguishing feature of *E. candelabrum* is the crowded mass of candelabralike upright branches.

Where every plant in the dry savannah-thornbush flora is subject to grazing (mostly over-grazing) by the large mammal population, *E. candelabrum* leads a charmed life, probably because of the spiny branches and toxic qualities of the vegetative parts of the plants. The toxin is apparently concentrated in the milky latex which flows freely wherever the branches are wounded.

The toxic properties of the latex were displayed to spectacular advantage in a recent popular movie, "The Gods Must Be Crazy" where one of the bad guys was rendered harmless by drippings of the latex of a wounded *Euphorbia* (purposely by the hero). The latex, which can be removed easily with water, can cause temporary blindness and severe skin irritation.

Ref: Dale, Ivan R. and P.J. Greenway. 1961. "Kenya Trees and Shrubs." Nairobi. Kenya Estates Limited, in assoc. with Hatchards, London.
Burkill, I.H. 1966. "A Dictionary of the Economic Products of the Malay Peninsula." Vol. 1(A-H): 1237-1238. Govts. of Malaysia & Singapore; Kuala Lampur, Malaysia.

Dr. Whitaker is Plant Geneticist, U.S. Department of Agriculture and Research Associate in Biology, University of California, San Diego Campus.

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CACTUS DISPLAY PLANNED FOR EXPOSITION

Further information regarding the cactus display for the California Pacific Exposition at San Diego has been received from Miss Kate Sessions, who writes:

"The permanent cactus display that is to be established on the west side of the New Mexico Building in Balboa Park will be the first general display in the open ground throughout the year in the United States of America, or even the world. This display will keep on growing and will be well cared for in Balboa Park. Everyone should enjoy making at least one donation of at least three [plants] of one species to help the cause. The various states will have individual displays of their native varieties. Due credit will be given every donor and a list of species planted will be published."

[Ed: The above mentioned cactus display was abandoned, but Miss Kate Sessions would be delighted with the cacti and succulent garden that is thriving today along the east side of Park Blvd. in Balboa Park, San Diego, California.]

'Showbiz' - Floribunda AARS Photo

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'Showbiz' is the only rose to win the AARS award in 1985. This floribunda has large, long lasting clusters of scarlet-red blooms $2\frac{1}{2}$ to 3 inches in diameter from spring until late fall. The buds open to scarlet red and hold that color throughout their life cycle on the bush or as cut flowers.

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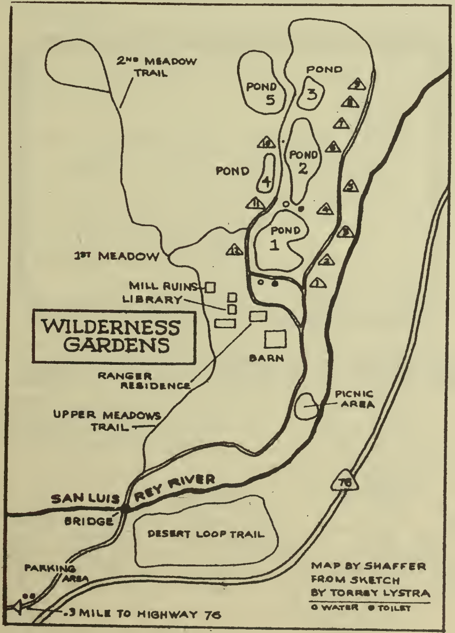
(Continued from Page 38)

to be done—reestablishing the greenhouses, propagation of the camellias, and restoration of the original ponds and irrigation systems. The creation of an educational and interpretative exhibit is planned, as well as improvements to the camping areas and trails.

John Muir sensitively wrote, "The clearest way into the universe is through a forest wilderness."

Dorothy Dudley Muth, a long-time resident of San Diego, California, has been active in civic projects to beautify and save its heritage. She is a charter member of Friends of Wilderness Gardens, The Committee of 100, and S.W.A.P.

Wilderness Gardens is located 45 miles north of San Diego. From I-15 it is 10 miles east of S76 to the park entrance. Open 11 months of the year, daily from 9:00 a.m. to 5:00 p.m., the Preserve is closed in August. There is a small parking fee for this gem of a walk-in wilderness. For futher information write to: Friends of Wilderness Gardens, %The San Diego County Park Society, P.O. Box 957, Bonita, CA 92002-0830.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The camellias Mr. Boddy planted 30 years ago that have survived without care for the last 15 years are listed below in the order they are growing along the tour trail:

'Jenny Jones'
'Kumasaka'
'Lotus'
'Ragland'
'Eureka Red' ('Sensation')
'Prince Eugene Napoleon' (Pope Pious)
'Alba Plena'
'Herme'
'Marceila Hovy'
'Mrs. Charles Cobb'
'Berenice Boddy'
'Magnoliiflora'
'Chandleri Elegans'
'Francine'
'Mercury'
'Purity'
'Eureka' var.
'Cheerful'
'Mathotiana Alba'
Camellia sasanqua (UNK)
C. pitardii (UNK)
'Jean May'
'C.M. Hovey' ('Colonel Firey')
'Shiro Chan'
'Covina'
'Pink Perfection'
'Debutante'

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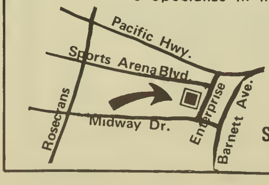
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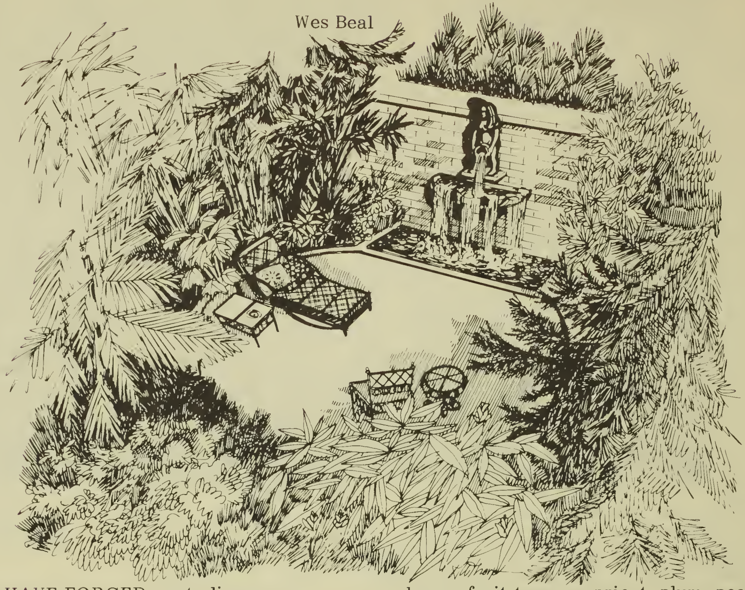
The Greatest Refreshments to The Spirits of Man

Wes Beal



Drawing courtesy of American Assoc. of Nurserymen

CIRCUMSTANCES HAVE FORCED me to live in an apartment the past few years. Often, when I feel cramped, I reflect on gardens I have tended, and realized that as I mature my understanding and appreciation of gardens grows broader, bearing a more philosophic fruit.

My earliest gardening experience was quite narrow. More than twenty years ago, when I was nine, I asked my parents to let me take care of part of the yard of our house in suburban Los Angeles. The plot they gave me was not much, the side of the house that received little sunlight.

The ferns and callalilies did not need any care. Few weeds grew, only a few sprouts that I thought came from seeds dropped by a small broad-leaved tree growing next to the house. I plucked the sprouts whenever they appeared. Other than that there was nothing to do except sit on my plot of land where it was cool and quiet, and look out toward the street.

My family soon moved from that house to Fresno (California) and my attention was diverted to other causes---baseball and girls. During adolescence, I worked in the yard grudgingly. In my early twenties, though, I fell under the spell of Thoreau and the romantic appeal of the soil. I became a professional gardener, driving a pickup laden with clippings, pulling a trailer full of equipment, following a steady route, mowing lawns and pruning bushes. I moved into a small house with a large yard. In the backyard were fruit trees---apricot, plum, peach, nectarine, orange, tangerine---which I kept pruned small so the fruit would be large and sweet, and so the trees would not block the sunlight from reaching the grass and the vegetable beds. These beds were strips between the lawn and the fence, and in them I grew beans, squash, cucumbers, corn, eggplant, tomatoes, and lettuce. Every year I looked forward to spring, when I spread compost over the soil, raked it smooth, formed furrows, sowed seeds. Everyday I inspected my garden, looking at the flowers and fruit of the trees, the vegetable plants as they grew tall and spread over the soil.

Occasionally I abandoned my work and my garden to backpack in the Sierras. I hiked up slopes scattered with granite boulders, through forests of sugar pine, white fir, incense cedar, red fir, and yellow pine. I climbed atop ridges, and looked for miles down valleys and ravines, and over the tops of treeless peaks. Everything was huge and mysterious. There was beauty, but no control. Once I strayed off the trail and was lost. Only by hiking along a creek for two hours, making my own trail among steep boulders, through thick forests, did I find my way back to the trail. At times I was scared. Another time, at night, snug in my sleeping bag, I awoke to the patter of rain on my face. Even during pleasant hours hiking, looking for flowers and birds, an uneasiness crept at the back of my mind. Though I believed I had entered a world of purity, uncorrupted by the evils of humanity, I also sensed a threat in the Sierras. It wildness, lack of human control, attracted me; but at the same time this wildness and sublimity overwhelmed and frightened me. After two or three days I was ready to return to my garden and its benevolent mysteries.

The plants, though in need of water, thrived while I was gone. That they grew by their own code, but where I planted them, requiring my care, was a great satisfaction to me. I complained, though, that my garden, confined by the city, was cramped, and I dreamed of having a large one in an open space. In his essay, "Of Gardens," Francis Bacon outlines his ideal garden, giving it the princely size of thirty acres. His garden, unlike mine, produced no food. It was built strictly for the pleasure of those who walked in it. Carefully proportioned, it was divided into three sections---the green, the main garden, and the heath. Bacon recommended that the garden not be cluttered, that there be spacious walkways, open spaces, and hills for elevated vistas. He included much details as arches, hanging plates of colored glass, cages of birds, and flowing fountains. He suggested that flowers be scattered on the walkways, to be crushed underfoot so their fragrance would perfume the air. Bacon's garden was a place of sensory delight isolated from both untamed nature and corrupt civilization. Writing when he was---at the end of the Medieval era, before reason and science displaced revealed religion*---the pleasures Bacon championed did not end with the senses, but stretched higher, to the contemplation of the divine. From the overall design to the smallest detail, Bacon's plan takes into account the harmony and beauty believed to come from God. The geometric proportions---the square and the circle---were derived from the platonic forms of divinity. The arched hedges raised one's eyes to God; the colored glass were ornaments reflecting God's beauty; the caged birds sang the harmony of God. Bacon said that gardens by their nature are good, for the first garden---Eden---was made by God for man's pleasure.

Sitting in the backyard of my home on spring afternoons I believed in the goodness of gardens. I may not have believed in God or platonic ideals, but I understood that the pleasure of the neat rows of vegetables, the fragrance of the fruit blossoms, and the songs of birds were more than sensory delights. Bacon said that a garden is "the greatest refreshment to the spirits of man." I felt refreshed. Although I may explain spirit in psychological rather than metaphysical terms, what Bacon suggested about a garden and what I felt in my garden are similar. By imposing Bacon's design on nature, men strolled in the midst of a harmony and beauty derived from God. They were refreshed by drawing nearer to God. By tending a garden, I worked among fruit trees and vegetable plants, derived from nature, ordered by a human being. I was refreshed by joining my hands in partnership with the earth.

Photo by Peter Richards

*Revealed religion: A belief that the deity had revealed himself and his will to his creatures.

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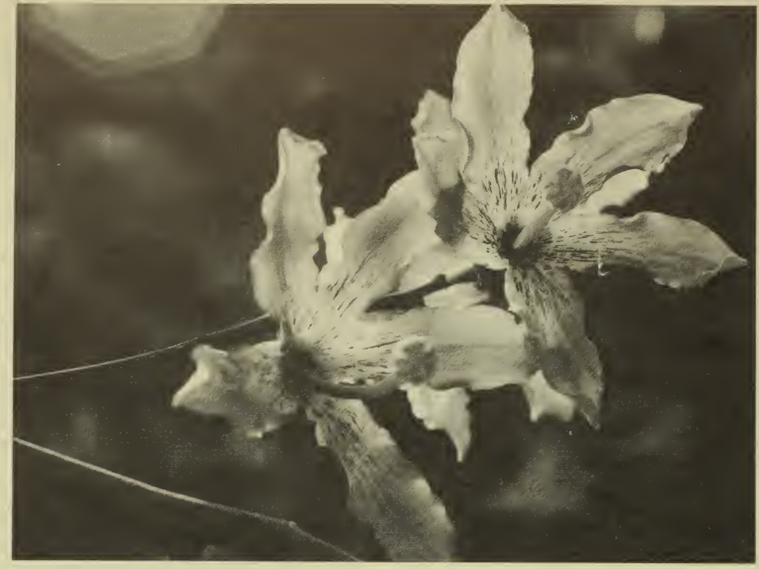


IN THE FALL THESE EXQUISITE 4- TO 6-INCH BLOSSOMS COVER THE ENTIRE CROWN FOR FOUR TO SIX WEEKS. Photo by Larry Pautler

THE FLOSS-SILK TREE

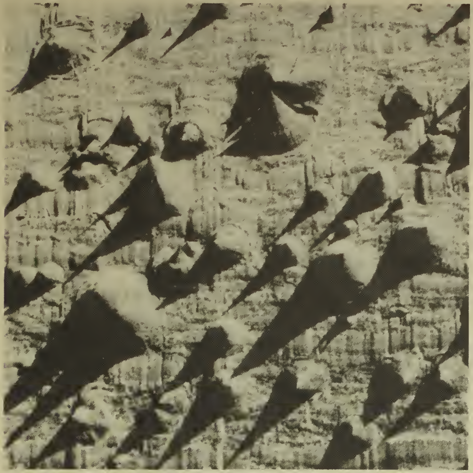
Bill Gunther

Augustin Francois Cesar Prouvencal De Saint Hilaire was the name of a French botanist who lived from 1779 to 1853d. To save space, the eminent botanical reference book *Hortus Third* uses the nickname, "St.-Hil" when referring to this botanist. We will do the same.

St.-Hil had a close friend, an artist, named Louis Choris, who was very handsome. So when St.-Hil needed a generic name for a newly-found very handsome tree with beautiful blossoms, he decided to name the genus *Chorisia*, in honor of his friend. Maybe it was an expression of love.

Chorisia speciosa, the floss-silk tree, is the most beautiful species in its genus. Variable 4- to 6-inch blossoms in light orchid-pink, purplish-rose, mulberry and burgundy burst suddenly from upright ball-like buds and cover the entire crown looking gay and springlike in the autumn landscape. One color dominates each tree, appearing on the outer edges of the widely separated petals. Its common name is derived from the flossy-silky parachutes which carry the seeds away with the wind. The large seed pods may be harvested before they open. After discarding the pod shells the silky seed floss makes an excellent pillow stuffing. This tree is native to interior Brazil and Argentina, where even now the native Indian tribesmen use the lance-straight trunks of this tree for making dugout canoes for travel along the rivers which are the only existing "roads" in much of that area. The natives also use the very tough fibers of the inner bark for making the rope which holds together the beams of their jungle houses.

Maybe you do not need a dugout canoe, a jungle shack, or a homemade pillow. But if you do need a truly dramatic central focal point for your garden, the floss-silk tree will serve your purpose well. It performs beautifully in the coastal areas of central and southern Califor-



SPINES ON THE TRUNK OF THE FLOSS-SILK TREE, CHORISIA SPECIOSA. Photo by Bill Gunther

nia and it will provide abundant topics of conversation for your garden guests. These topics include the beautiful blossoms, the horrible looking horns which stud the tree trunk, the flossy seed parachutes flying away, and also the unique light green fingerlike leaves which sometimes, without warning, all fall within a day or two, leaving the tree bare for a few weeks.

The blossom color of the typical floss-silk tree is a combination of white, cream, and rose. If you prefer wine-red colored blossoms, ask your nurseryman to obtain the grafted selection 'Los Angeles Beautiful.' Another available selection is 'Majestic Beauty,' which has blooms of a rich pink color.

These trees grow fast the first few years, slowing conveniently before reaching 30 to 60 feet. Their grass-green trunk turns gray as the tree matures.

Plant a young tree in a location which provides full sun, excellent drainage, and plenty of room to grow. Give it a good soaking once a month. Nothing more will it ask.

ERRATA

JAN-FEB 1985 Issue:
Page 10 - Correct "CHUM RUOT" to "KHO QUA." (Under left illustration)
Page 11 - Correct "FIG is the symbol of reputation." to "FIG is the symbol of prosperity." (Pineapple is the symbol of reputation.)

BOOK REVIEW

Reviewed by Barbara Jones

INSECTS OF THE WORLD by Anthony Wootton. 1984, Blandford Press, Ltd., Facts on File, Inc., 460 Park Ave., New York, NY 10016. $17.95, $9\frac{1}{2}$X$6\frac{1}{4}$ in., hardback, 224 pages.

It is not difficult for a gardener to accept the fact that there are nearly one million recognized species of insects occupying every conceivable habitat. Over three-fourths of the world's living creatures are insects. The way that insects have adapted to their environment is truly remarkable.

By reading this book one will find that there is no such thing as a typical insect. One of the most interesting chapters is about insects and their relationships with man.

Naturalist Wootton has illustrated this fascinating, readable book with many excellent drawings and photographs, in both color and black and white.

This attractive book would be an excellent addition to anyone's personal library or would make a fine gift for a gardening friend.

SPIDERS OF THE WORLD by Rod and Ken Preston-Mafham. 1984, Bradford Press, Ltd., Facts on File, Inc., 460 Park Ave., New York, NY 10016. $17.95, $9\frac{1}{2}$X$6\frac{1}{4}$ in., hardback, 191 pages.

Although few spiders are dangerous to man, they are often associated with witches, poisonous appetites, and bad luck. Spiders have become a part of folk mythology and legends in many parts of the world. Did you know Little Miss Muffet actually existed and was probably the daughter of Thomas Muffet, a spider enthusiast? Gardeners have learned to value spiders, but most poeple do not appreciate these misrepresented creatures.

The elaborate courtship rituals, mating, life histories, defense mechanisms, and hunting techniques of the many different spiders are fascinating.

Rod Preston-Mafham is a zoologist and his brother Ken is a professional wildlife photographer. They have combined their skills in this interesting, extensively illustrated book with 64 color and 45 black and white photographs and 29 illustrations. Although this book probably will not make one a spider lover, it is an attractive and very readable book which would be a fine addition to anyone's gardening library.

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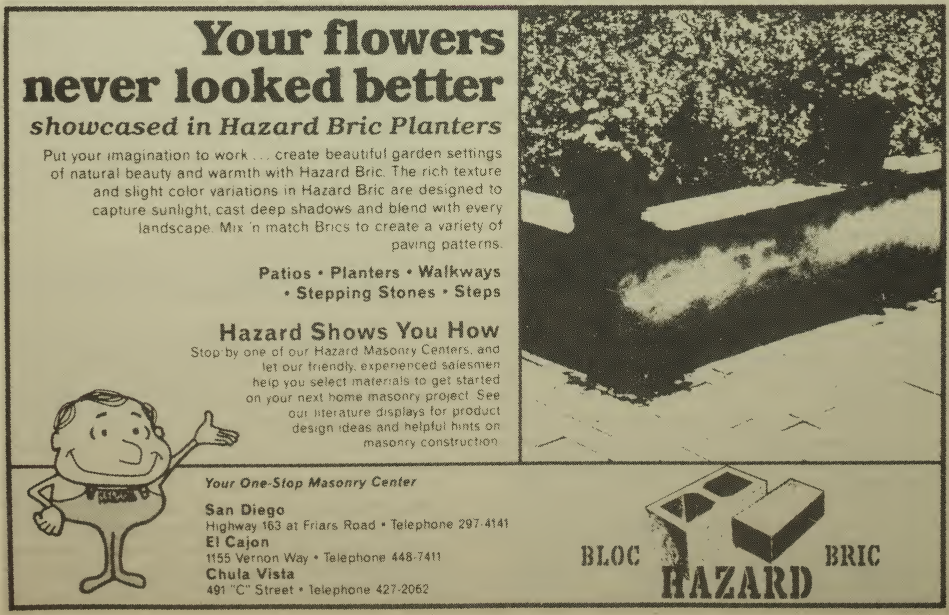
GARDEN STUDY COURSE IV

The fourth in a series of garden classes designed by the National Council of State Garden Clubs and sponsored locally by the San Diego Floral Association will be offered on two consecutive Saturdays, March 16 and 23, 1985. Classes will be held in the San Diego Floral Association Library, Casa del Prado, Balboa Park, San Diego, California.

Sheri Holladay, Bob Murphy, and Gary Stromberg will be the instructors. Subjects to be covered include techniques for growing trees and shrubs, techniques for growing fruit, water conservation through use of native plants, plant identification, and specialized gardening.

Students successfully completing the four classes in the series will receive a Garden Consultant Certificate issued by the National Council of State Garden Clubs. The classes are also open to those who do not desire certification.

DID YOU KNOW There are ten common names for Epipremnum aureum: pothos, golden pothos, pothos vine, taro vine, devil's ivy, Solomn Island ivy, hunter's robe, golden hunter's robe, variegated philodendron, golden creeper, and ivy arum.



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Book Reviews

Reviewed by Allethe Macdonald

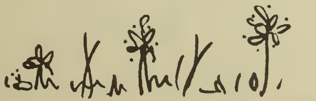
Blandford Gardening Handbooks - **GARDEN PLANNING & DESIGN. GARDEN CONSTRUCTION. GREENHOUSES, CLOCHES, & FRAMES** all by Peter McHoy, 1984. Blandford Press, Link House, West Street, Pool Dorset, BH15 1LL. Distributed by Sterling Publishing Co., Inc., Two Park Ave., New York, NY 10016. Each book $6. 95 (US), $8.95 (Can.), 5 3/4 X 7 3/4 in. paperback, 128 pages.

GARDEN PLANNING & DESIGN. McHoy, a well-known gardening consultant and horticultural writer gives easy to follow advice on every facet of garden design to make the most of any garden plot. He discusses analysing your plot before drawing up definite plans for paths and drives; fences, walls, and gates; hedges, patios and paved areas; raised beds; water gardens; kitchen gardens; children's gardens, etc. He devotes 38 pages to "Ideas to Follow" with photographs and graphics. Excellent illustrations are used throughout the book. A section with text and charts gives descriptions of all kinds of plants, their height and spread, soil and sun suitability, and even plants that will grow in the cracks of pavement.

GARDEN CONSTRUCTION. In this book McHoy gives clear concise instructions for the actual construction of the garden from site preparation to making a lawn and flower beds, to building a fence or a wall, and hanging a gate. There are longer chapters on making a patio and on paths and drives which cover laying and finishing concrete or bricks and the materials needed. The carefully selected color photographs, and illustrations guide the gardener in accomplishing all the plans discussed in GARDEN PLANNING & DESIGN.

GREENHOUSES, CLOCHES & FRAMES. In the first chapter one reads: "Although a greenhouse is not expensive when you take into account the hours of enjoyment to be gained... It makes sense to choose carefully... If you decide what you want from your greenhouse before you go shopping for it, the range will seem much less bewildering, and it will be easier to compare models within the range that is right for your purpose." McHoy then discusses: aids and equipment; heating and insulation, culture of plants, propagation, and pests and diseases.

A third of the book, with illustrations, is devoted to the selection, care, and propagation of greenhouse plants, both ornamental and those grown for food.



GROW YOUR OWN HEALTH FOODS by Roy Genders, 1984, Sterling Publishing Co., Inc., Two Park Ave., New York, NY 10016, 6 X 9 in. paperback, $6.95 (US), $8.95 (Can.), 159 pages.

The author discusses briefly food requirements for a healthy body before giving basic instructions for preparing the garden soil, germination time of vegetable seeds, and a sowing and harvesting chart for a year's supply of food.

A brief discussion of the food value, how to plant, and when to harvest is given for each of the foods listed, which are divided into categories: vitamin rich vegetables for winter use; the valuable root crops; salads; summer vegetables; sprouting seeds; herbs and fruits.

Simple concise information for anyone interested in growing these foods, including suggestions of ways to grow them in window boxes, hanging baskets, tubs, and sheds and cellars are given.

Also an interesting book for armchair reading.

GARDEN CONIFERS. HEATHERS. Both books by Brian & Valerie Proudley. Blandford Press, Link House, West Street, Poole Dorset, BH15 1LL. Distributed in US by Sterling Publishing Co., Inc., Two Park Ave., New York NY 10016, 5X7½ in. hardback, $9.95 (US), $12.95 (Can.).

GARDEN CONIFERS, printed in 1984, 216 pages.

To quote the Proudley's, "The conifers described in these pages can provide, either alone or in compnay with other plants, all the components to create a garden as pretty as a picture." They deal with a wide choice of conifers available to the gardener and full details of planting and propagation are given, together with the suitability to different soils and climatic variations in the temperate zone for over 500 cultivars. There are 118 color photographs, each depicting conifers of different ages and types; many are close-ups of individual branches which make identification easier.

A pocket-size book that could easily be carried, when visiting parks and gardens, for identifying and choosing conifers for one's own garden.

HEATHERS, reprinted 1983, 191 pages.

Brian & Valerie Proudley working with the Heather Society of Great Britian, have written this handbook with 64 pages of color photographs, seasonally arranged, illustrating the variation of heathers in their annual cycle. They have grown heathers in their own garden for many years and much of their information was researched in their own plantings. The uses, cultivation requirements, color grouping suggestions, and propagation are all discussed in an easy style. A comprehensive description of 350 cultivars, often with line drawings, completes the handbook.

A BOOK OF WILDFLOWERS by William A. Niering, Ill. by Anita Marci, 1984. William Morrow & Co., Inc., 105 Madison Ave., New York, NY 10016, 4½X6½ in. hardback, $10.00, 128 pages.

Niering, Prof. of Botany, Connecticut College, selected 55 beautiful species from both North America and Europe ranging from black-eyed Susans and buttercups to spectacular lilies, orchards, and irises. His explanations of habitats, varieties, and folkloric uses are on one page opposite a full page exquisite watercolor of the wildflower.

This is a small hand-sized jewel of a book.

A BOOK OF ROSES by Bryant Logan, 1984. William Morrow & Co., Inc., 105 Madison Ave., New York, NY 10016, 4½X6½ in. hardback, $10.00, 128 pages.

Another small book with the same format as the one above. The 55 roses were selected by Peter Nalins, rosarian of the Brooklyn Botanic Garden. Logan's descriptions, including the pedigree and suggested garden uses, are delightful. An example, 'Oregold' — "A bloom will float like a rising sun when placed alone in a shallow bowl."

Drew McGhie's full page paintings, in natural color, of these 55 perfect blossoms are lovely.

A WILDFLOWER ALPHABET by Elizabeth Cameron, 1983. Webb & Bower, Ltd., 9 Colletion Crescent, Exeter Dover, EX2 4BY. Published 1984 in US by William Morrow & Co., Inc., 105 Madison Ave., New York, NY 10016, 8X11 in. hardback, $9.95, 64 pages.

A perfectly charming book originally written to acquaint her grandchildren with wildflowers. Each wildflower from A to Z has delightful watercolor illustrations with the hand-lettered passages giving derivation of the name and how to pronounce it. A description of its habitat, practical uses, and legends, along with a few lines of what Mrs. Cameron calls her doggerel verse, is on one or more pages opposite a lovely full page watercolor drawing of the flower described.

A perfect gift for any child or grandmother.

The Complete Handbook of **GARDEN PLANTS** by Michael Wright, 1984. Published in US by Facts on File, Inc., 460 Park Ave. South, New York, NY 10016, designed and produced by the Rainbird Publishing Co., 40 Park St., London, W 1.5½ X 8 in. hardback, $18.95, 544 pages.

This is a handy guidebook to over 9000 species and varieties of decorative outdoor garden plants grown in temperate climates of the world. The format is organized according to basic plant types, such as trees, shrubs, climbers, perennials, bulbs, rock plants, etc. A color plate of botanical drawings is opposite each page of plant descriptions of the size, habits, flowering season, form and color, as well as sun and soil needs, and hardiness.

A book that gardeners and garden enthusiasts would be delighted to have in their library.

BOTANY IN THE FIELD by Jane Scott. An Introduction to Plant Communities for the Amateur Naturalist by Jane Scott, 1984. Prentice-Hall, Inc., Englewood Cliffs, NJ 07632, 7X9¼ in. paperback $8.95, 165 pages.

The author's excellent black and white line drawings enhance her text which is written in a style that makes this book as interesting for armchair reading as for the naturalist student studying plant communities. On page 69, "The first yarrows, Achillea millefolium, bloom in June. The flowers of some are not the usual creamy white but a subtle dusky pink. By late June the common milkweed, Asclepias syriaca, unfolds heavy pink blossoms that hang like fragrant popcorn balls in the leaf axils. The five petals are attached to a clublike column and hang down rather like a tiny hula skirt, hiding the sepals."

DICTIONARY ON BOTANY, Elizabeth Tootill, General Editor: Stephen Blackmore, Consultant Editor, 1984. Facts in File, Inc., 460 Park Ave. South, New York NY 10016, 6 X 8 3/4 in. hardback, $21.95, 390 pages. Pub. simultaneously in United Kingdom by Penguin Books Ltd.

Prepared by Market House Books Ltd., Aylesbury, England, this dictionary encompasses both the pure and applied aspects of plant science including: taxonomy, anatomy, physiology, biochemistry, cell biology, plant pathology, genetics, and ecology. Also covered are selected terms from the fields of agricultural botany, horticulture, and microbiology.

This is a technical reference source for high school students, undergraduates studying botany as well as anyone interested in horticulture, agriculture, or physical geography.

THE VICTORIANS AND THEIR FLOWERS by Nicolette Scourse, 1983. Croom Helm Ltd., Provident House, Burrell Row, Beckenham, Kent BR3 1AT. Published in US by Timber Press, P.O. Box 1632, Beaverton, OR 97075, 7½X10 in. hardback, $22.95, 215 pages.

An extraordinary book—a combination of authoritative botanical information and fascinating social history richly illustrated by photographs, in color and black and white, of Victorian floral extravaganzas and reproductions from botanical plates of the era. Dr. Scourse gives a fresh new perspective on this remarkable period and the enormous impact this era had on the gardens of today. No aspect of the Victorian efflorescence in gardening and the nineteenth century explosion of knowledge is left untouched. Much of the variety and glory of our gardens today is a legacy from the Victorian's world-wide preoccupation with plants.

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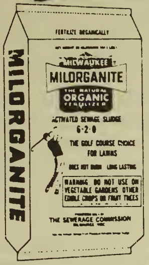
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compiled by PENNY BUNKER

A CULTURAL CALENDAR OF CARE FROM OUR AFFILIATES

BEGONIAS Margaret Lee

Now is the time
- to cleanup. Clear out all dried leaves, spent blooms, and dead wood.
- to trim back stragglers and restake where needed.
- to prune for shape, and to encourage more side-growth. It is advisable to prune gradually, not more than 1/3 of the plant at a time to avoid too great a shock.
- to water plants when there are no rains; keep plants moist, not wet.
- to mulch with a top dressing to protect roots.
- to repot those that need it.
- to start a spray program to control pests and disease.
- to start sprouting the beautiful tuberous begonias.
- to start new plants from leaves or cuttings.

BONSAI Dr. Herbert Markowitz

Now is the time
- to watch watering program if no rains.
- to graft deciduous trees.
- to protect from extreme cold; place in garage or under cover.
- to move trees gradually into more sunlight to encourage healthy growth; take care of deciduous trees to avoid scorching their new leaves.
- to watch for aphids and other pests.
- to add small amounts of chelated iron or acidifying preparations to correct alkaline salts buildup.
- to start trimming shoots which have changed the shape of the trees.
- to wait until April to fertilize. It is better to use ½ strength spaced several weeks apart than to use full strength only once. Be careful not to use too much fertilizer as it can burn roots and cause leaf-tip damage.

BROMELIADS Linda Prell

Now is the time
- to begin repotting plants that have outgrown their containers.
- to check plants for snails and slugs; distribute bait around the plants, not in the cups.
- to begin removal of pups that are at least 1/3 the size of the mother plant.
- to keep cups free of rotting debris.
- to trim off damaged leaves caused by cold weather. Clean up plants.
- to begin a regular fertilization schedule using ½ strength balanced fertilizer.
- to remember insufficient light will keep the gorgeous colors from appearing in the leaves. If you have pale plants, increase the light.

CACTI & SUCCULENTS Rick Latimer

Now is the time
- to let winter-active succulents become dormant; for example, some cacti, the winter growing mesembs, cotyledons, dudleyas, and pelargoniums.
- to continue to water some genera, such as most of the aeoniums, but some should receive no water, such as the conophytums.
- to check succulents between the above extremes for their need of water. Depending upon the needs of the particular plant, spray only enough to keep roots alive to prevent extreme shriveling.
- to begin watering the summer active succulents such as most cacti, stapelias, senecios, and anacampseros. Lithrope may be watered after they have used up last years leaves.
- to take immediate action if pests are discovered. Check in plant crevices, under leaves, along the stems, roots, and buds.
- to propagate plants from divisions and cuttings.

CAMELLIAS Les Baskerville

Now is the time
- to maintain a regular watering program if no rains.
- to feed plants with fish or acid fertilizer.
- to keep blooms picked up to prevent petal blight.
- to prune plants as they finish blooming to open up plants to air.
- to feed iron to promote healthy green growth.
- to watch for loopers and spray with malathion if present.
- to plant new bushes while still in bloom.

DAHLIAS Abe Janzen

Now is the time
- to remove tubers from storage and place in sprouting medium—vermiculite, sand, or other starting material.
- to check moisture of medium. Tubers will rot if it is too wet.
- to prepare planting area, fork in humus and fertilizers, especially super

phosphate and potash (use 2½ lbs. for each 100 square feet of ground.
- to drive stakes into ground before planting tubers.
- to plant tubers two or three weeks after sprouting. Dig a hole 6 inches deep, mix in bone meal, then place tuber on its side, with sprout up, 2 inches from stake. Cover with 3 inches of soil, moisten, but do not keep wet.
- to protect from snails.

EPIPHYLLUMS (Orchid Cacti) Frank Granatowski

Now is the time
- to maintain good grooming by removal of dead, spindly and unsightly branches.
- to remove dead leaves and debris from containers, eliminating a haven for harmful pests and allowing free flow of oxygen to the soil and root system.
- to remove scale residue clinging to the sides of containers.
- to give mature plants a final feeding of nitrogen-free fertilizer, such as Bloom-Builder or Hi-Bloom, to promote healthy buds and blooms.
- to watch new buds and blooms for aphids and ants attracted by the nectar; if necessary, use insecticides such as Orthene and malathion. Carefully read and follow directions on the label.
- to refrain from relocating plants once buds have begun to form.
- to bait for snails, a few granules of Sluggeta have proved effective when placed at the base of plants, leaving little or no residue.

FERNS Ray Sodomka

Now is the time
- to remove dead fronds.
- to divide, repot, or add leaf mold to those plants needing it.
- to fertilize with high nitrogen liquid or pellets.
- to spray for aphids and scale.
- to plant spore.
- to catch rain water to use on plants in covered areas.
- to maintain humidity by keeping surrounding areas damp.

FUCHSIAS William Selby

Now is the time
- to pinch new growth on plants that were pruned earlier. As the third set of leaves form on the new growth, pinch out the terminal set to give a bushier plant.
- to fertilize with any good balanced fertilizer.
- to prune plants that were not done earlier.
- to watch for rust, aphids, or inch worms and treat accordingly.
- to water thoroughly the day before spraying.
- to cleanup fallen leaves, blossoms, and trash.
- to continue to take cuttings from prunings.
- to watch any frostbitten plants. They may recover. Do not prune until new growth starts, then prune to the new growth.

GERANIUMS Carol Roller

Now is the time
- to water thoroughly when plants become somewhat dry. Allow excess to drain away. Keep foliage as dry as possible.
- to continue a balanced fertilizer dissolved in water, using about half the recommended strength as often as needed to keep plants growing well.
- to continue a pest control and disease prevention program using products according to the manufacturer's directions.
- to selectively prune and pinch zonals and ivies for future bloom. Avoid cutting regals because their flowers will be lost by pruning at this time.
- to remove faded flowers and old, discolored leaves.
- to continue to rotate plants in order to produce well-shaped plants.

GESNERIADS Mike Ludwig
(African violets, gloxinias, etc.)

Now is the time
- to clean debris from around plants. Discard old leaves and flowers.
- to repot root-bound plants, cut off dead roots that look brown and soft.
- to start feeding as new growth starts.
- to rim plants and take cuttings.
- to cleanup growing areas and spray for mildew and mold.
- to spray for aphids before new growth is out and bait for slugs and snails.
- to fertilize in April with trace elements if you did not repot earlier.
- to use a liquid chelated iron, if growing tips shows yellow; spray the foliage twice, at three days intervals. If leaf shows green only in the veins, it has been watered too much.

HEMEROCALLIS Southwest Hemerocallis Society
(Daylilies)

Now is the time
- to divide overgrown plants before hot weather.
- to replant in well-prepared soil with plenty of humus.
- to fertilize established plants with a fertilizer of 1-1-1 ratio (such as 6-6-6) or a 1-2-1 ratio (such as 5-10-5). Do not feed new plantings until they have become established.
- to control aphids if necessary.

IRISES San Diego-Imperial Counties Iris Society

Now is the time

- to clean beds and keep weeds under control.
- to water regularly if no rains.
- to start feeding with low-nitrogen, all purpose or liquid fish fertilizer.
- to watch for pests. Systemic sprays applied as a drench will usually free irises of aphids and thrips.
- to give Japanese and Louisianas acid food; camellia-type fertilizer may be used.
- to feed spurias.

ORCHIDS Charlie Fouquette

Now is the time

- to check spiking plants and stake them if necessary. Be careful about turning pots as the spikes can be distorted reaching for the sun.
- to fertilize cymbidiums with a 30-10-10 fertilizer and give them as much light as possible without burning the foliage for better flowering next season.
- to check cymbidiums for their need to be repotted and/or divided. Repot or divide as soon as possible to give new growth time to mature before the next blooming season.
- to be cautious when watering, your potting medium will be slow in drying out during cloudy spring days.
- to be extra careful when watering phalaenopsis so that water does not remain in the crown overnight.
- to continue to be alert for cold drafts or sudden temperature drop that causes bud blasting.
- to check for slugs and snails, their reproduction cycle is accelerated during damp spring days.
- to do spring house cleaning; cleanup benches and space around plants. Slugs, snails, and sow bugs hide in debris between their nightly foray on cherished flower spikes. Do not leave a place for them to hide in or under.
- to check sunlight intensity as summer approaches. You may need to start applying shade for the outdoor plants.

ROSES Brian Donn

Now is the time

- to supply plenty of water for growing plants if rainfall is light.
- to feed established plants with a balanced rose food every 3 to 4 weeks, except when in full bloom.
- to give liquid rose food to new bushes when growth is about 2 inches long.
- to give newly planted bushes that seem to be growing slowly, a root-stimulate such as Hormex or Super Thrive.
- to keep foliage beautiful, disease, and pest free, use (about every 10 days) Orthene and Funginex, which can be mixed together and applied in one application. This mixture may be used to eliminate thrips which cause brown 'freckles' and streaks on petals.
- to check foliage for signs of worms or rose slugs. Spray with malathion or Sevin---only use the powder form on new growth to prevent buring new foliage.
- to keep check on hybrid tea roses, disbud while sidebuds are immature.

VEGETABLES

Now is the time

- to start seeds of beans, corn, cucumber, eggplants, peppers, summer squash, and tomatoes in pots to protect seedlings---transplant to garden in April and May.
- to set plants of broccoli, cauliflower, celery, chard, kale, lettuce, onions, and collards which are available at nurseries.
- to set plants previously started or obtained from nurseries---cucumber, eggplant, pepper, tomato, and summer squash.
- to protect plants from frost and rain with a translucent cover.
- to set bulbs of onions and cloves of garlic.

GREEN THUMB ITEMS

Now is the time

- to finish planting bareroot trees and shrubs in March.
- to prune spring flowering shrubs and trees using sprigs for arrangements to enjoy their beauty. After blooming is finished, mulch with leaf mold and manure and water well.
- to cut back poinsettias, removing all last year's growth to within two joints of the old wood.
- to divide chrysanthemums. Make divisions and take cuttings from old plants.
- to set out annuals such as zinnias, pansies, marigolds, and petunias for spring and early summer color.
- to tie up foliage of daffodils and narcissus to be neat, but do not cut off until it has naturally withered and dried---the leaves feed bulbs for next season's flowers.
- to plant perennials such as carnations, gerberas, marguerites, Shasta daisies.
- to plant cannas, gladiolus, and tuberous begonias.
- to feed nearly everything in April that was not fed in March.
- to mulch and reseed lawns in April where necessary; to feed the well established lawn.
- to water bedding plants, small trees, and shrubs if rains have ended.

(Continued from Page 36)

SAN DIEGO CACTUS & SUCCULENT SOCIETY
Pres: Dr. Leroy Phelps 280-9690
4094 - 36th St, San Diego 92104
2nd Sat, Casa del Prado, 1:30 p.m.

SAN DIEGO CAMELLIA SOCIETY
Pres: Mr. John Nichols 435-4971
1026 Flora Ave, Coronado 92118
3rd Wed, Casa del Prado, 7:30 p.m.

SAN DIEGO COUNTY BRANCH,
NATIONAL FUCHSIA SOCIETY
Pres: Mr. Mike Reilly 434-1838
4024 Crescent Pt. Rd,Carlsbad 92008
2nd Thurs, Heritage Hall,McGee Park
258 Beech, Carlsbad, 7:00 p.m.

SAN DIEGO COUNTY DAHLIA SOCIETY
Pres: Mr. Martin Walsh 277-5165
4077 Mt.Everest Blvd,SanDiego 92111
4th Tue, Casa del Prado, 7:30 p.m.

SAN DIEGO COUNTY HERB SOCIETY
Pres: Mrs. Barbara Baker 755-9226
P.O. Box 1387, Rancho Santa Fe 92067
2nd Sat, Homes of Members, 11:00 am
(No meetings in July or August.)

SAN DIEGO COUNTY ORCHID SOCIETY
Pres: Mr. Jesse Canale 274-1144
3436 Brandywine St, San Diego 92117
1st Tues, Casa del Prado, 7:30 p.m.

SAN DIEGO DAYTIME AFRICAN VIOLET SOC.
Pres: Mrs. Toni Baker 582-7516
6475 - 50th St, San Diego 92120
2nd Mon,Fellowship Hall,ChristUnited
Methodist Church, 3295 Meade,12 Noon

SAN DIEGO EPIPHYLLUM SOCIETY
Pres: Mr. Eugene Lund 469-1677
5666 Aztec Dr, La Mesa 92041
2nd Wed, Casa del Prado, 7:30 p.m.

SAN DIEGO FERN SOCIETY
Pres: Mr. Marvin Haworth 465-2727
10453 Fairhill Dr,SpringValley 92077
3rd Thurs, Casa del Prado, 7:30 p.m.

SAN DIEGO FUCHSIA & SHADE PLANT SOCIETY
Pres: Mr. Ron Berkel 465-7649
1142 Osage Dr, Spring Valley 92077
2nd Mon, Casa del Prado, 7:30 p.m.

SAN DIEGO GERANIUM SOCIETY
Pres: Mrs. Eugene Cooper 295-7938
4444 Arista Dr, San Diego 92103
2nd Tues, Casa del Prado, 7:30 pm

SAN DIEGO GESNERIAD SOCIETY
Pres: Mr. Mike Ludwig 574-1138
642 Torrance St, San Diego 92103
1st Thurs, Casa del Prado, 7:30pm

SAN DIEGO-IMPERIAL COUNTIES IRIS SOC.
Pres: Mrs. Archie Owen 753-7648
227 Peckham Place, Encinitas 92024
3rd Sun, Glendale Federal S&L
740 Lomas SantaFe,SolanaBeach,1:pm

SAN DIEGO ROSE SOCIETY
Pres: Mr. Henry McCarty 749-8560
28034 Glenmeade Way,Escondido 92026
3rd Mon, Casa del Prado, 7:30 p.m.

SOGETSU SCHOOL OF IKEBANA
Pres: Mrs. Leroy Lahey 423-1571
2829 Flax Dr, San Diego 92154

SOUTHWEST GROUP, JUDGES COUNCIL
Chair:Mrs.Ralph E.Rosenberg 295-1537
3671 Pringle St, San Diego 92110
1st Wed, Casa del Prado, 10:00 a.m.

SOUTHWEST HEMEROCALLIS SOCIETY
Pres: Mr. C. R. Bowman 273-7937
3927 Sequoia St, San Diego 92109
1st Sat, Feb-Apr-Jun-Sep-Nov,10:a.m.
Quail Gardens Meeting Room
Quail Gardens Rd, Encinitas

VILLAGE GARDEN CLUB OF LA JOLLA
Pres: Mrs. Edward Sheldon 456-0506
656 Granville Place, La Jolla 92037
4th Thurs, La Jolla United Methodist
6063 La Jolla Blvd, La Jolla, 1:00pm

PROFESSIONAL DIVISION

CALIFORNIA ASSOCIATION OF NURSERYMEN,
SAN DIEGO CHAPTER
Pres: Mr. Hank Coide 297-4216
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(Continued from Page 34)

APR 13, 14	**SAN DIEGO ROSE SOCIETY 58TH ANNUAL SHOW "ROSE REFLECTIONS"** Balboa Park Club, Balboa Park, San Diego Sat: 2:00 to 7:00 p.m. Sun: 10:00 a.m. to 6:00 p.m. Donation: $1
APR 13, 14	**SOUTH BAY BROMELIAD ASSOCIATE 18TH ANNUAL SHOW** South Coast Botanic Gardens, 26300 South Crenshaw Blvd., Palos Verdes Peninsula, Calif. Sat: 12:00 to 4:30 p.m. Sun: 10:00 a.m. to 4:30 p.m. Admission to Garden: $1.50; Students, Youths 5-7, 62 or over: 75¢
APR 13, 14	**FALLBROOK GARDEN CLUB 54TH ANNUAL FLOWER SHOW "COUNTRY CHARM"** Potter Jr. High School, Bower's Auditorium, 1743 Reche Rd., Fallbrook, Calif. - Sat: 2:00 to 8:00 p.m. Sun: 10:00 a.m. to 4:00 p.m. Free
APR 16 San Diego Floral Event	**SAN DIEGO FLORAL ASSOCIATION MEETING** **SPECIAL DINNER & PROGRAM** Majorca Room, Casa del Prado, Balboa Park, San Diego Tues: 6:00 p.m. Program: 7:30 p.m. Reservations: (No Later Than April 12th) 488-0082
APR 16, 17	**POINT LOMA GARDEN CLUB 15TH STANDARD FLOWER SHOW "LET'S HAVE A PARTY"** St. Peter's-by-the-Sea Lutheran Church,1371 Sunset Cliffs Blvd., San Diego—Tues: 1:00 to 5:00 p.m. Wed:10:00 a.m. to 4:00 p.m. Free
APR 20, 21	**SAN DIEGO BONSAI CLUB 20TH ANNUAL SPRING SHOW** Special demonstration by John Y. Naka, world renouned Bonsai Master and author. Majorca Room, Casa del Prado, Balboa Park, San Diego Free Sat.& Sun:10:00 a.m.to 5:00 p.m. Demo/Lectures: 1:00 & 3:00 p.m.
APR 27	**RANCHO SANTA ANA BOTANIC GARDEN FIRST SPRING OPEN HOUSE** Displays, Demonstrations, Guided Tours 1500 N. College Ave., Claremont, CA Sat: 9:00 a.m. to 4:00 p.m.
APR 27	**VILLAGE GARDEN CLUB OF LA JOLLA ANNUAL PLANT SALE** Central Federal Savings & Loan, 7777 Girard (at Silverado), La Jolla Calif. - Sat: 9:00 a.m. to 3:00 p.m.
APR 27, 28	**FRIENDS OF FULLERTON ARBORETUM 12TH ANNUAL "GREEN SCENE"** Fullerton Arboretum Grounds, California State University, Fullerton Campus, off Freeway 57, west on Yorba Linda to Associated Road, Fullerton, Calif.- Sat. & Sun: 10:00 a.m. to 4:00 p.m. Free
APR 27, 28	**SAN DIEGO-IMPERIAL COUNTIES IRIS SOCIETY 20TH SPRING SHOW "SPRING IRIS FIESTA"** Majorca Room, Casa del Prado, Balboa Park, San Diego Sat: 12:30 to 5:00 p.m. Sun: 10:00 a.m. to 5:00 p.m. Free
MAY 4, 5	**DOS VALLES GARDEN CLUB STANDARD FLOWER SHOW "RURAL LIFE HAS CHARM"** Valley Center Community Church, 29105 Valley Center Road, Valley Center, CA - Sat: 1:00 to 5:00 p.m. Sun: 12:00 to 5:00 p.m. Free
MAY 4, 5	**EXOTIC PLANT SOCIETY ANNUAL FLOWER SHOW** Majorca Room, Casa del Prado, Balboa Park, San Diego Sat. & Sun: 11:00 a.m. to 5:00 p.m. Free
MAY 5	**QUAIL BOTANICAL GARDENS FOUNDATION "FUN & FUNDS FESTIVAL"** Quail Gardens, Ecke Family Bldg., 230 Quail Gardens Dr., Encinitas, Calif. - Sun: 10:00 a.m. to 4:00 p.m. Free

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